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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/390,583 09/02/99 ANDERSEN P 11527.209

022913 IM22/0109
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EXAMINER

COPENHEAVER, B

ART UNIT

PAPER NUMBER

1771

14

DATE MAILED:

01/09/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/390,583

Applicant(s)
Andersen et al.

Examiner
Blaine R. Copenheaver

Group Art Unit
1771



☒ Responsive to communication(s) filed on Oct 4, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 32-51 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 32-51 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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1. The original patent, or an affidavit or declaration as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

2. As set forth in MPEP 1455, a list of references to be printed in the reissue patent should include **both the references cited during the original prosecution** as well as the references cited during the prosecution of the reissue application (Emphasis Added). Because of the numerous references cited during the original prosecution, the Examiner is requiring that the Applicant submit a listing of each of these references on a PTO-1449 in response to this Office Action.

3. In accordance with 37 CFR 1.175(b)(1), a supplemental reissue oath/declaration under 37 CFR 1.175(b)(1) must be received before this reissue application can be allowed.

Claims 32-51 are rejected as being based upon a defective Declaration under 35 U.S.C. 251. See 37 CFR 1.175(b)(1).

Receipt of an appropriate supplemental oath/declaration under 37 CFR 1.175(b)(1) will overcome **this** rejection under 35 U.S.C. 251 (Emphasis Added). An example of acceptable language to be used in the supplemental oath/declaration is as follows:

"Every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the applicant."

4. The reissue oath/declaration filed with this application is defective because the error which is relied upon to support the reissue application is not an error upon which a reissue can be based. See 37 CFR 1.175(a)(1) and MPEP § 1414.

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5. The reissue oath/declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because of the following: claims 32-51, are drawn to subject matter which was canceled in response to a restriction requirement during the prosecution of the original patent (See MPEP 1450 and *In re Orita*, 193 USPQ 145). Reissue may not be utilized to reclaim subject matter which was nonelected in the original application. 35 USC 251 cannot be used to circumvent other statutory requirements, e.g. the copendency requirement of 35 USC 120 for filing divisional applications on nonelected subject matter. It is noted that in the original application, namely U.S. Serial No. 08/327,524, the examiner required a three group restriction in Paper #5. In that restriction requirement, Group I, the starch-based composition, was elected and ultimately issued into U.S. Patent No. 5,662,731. And, Group II and Group III were drawn to the formed foamed article and method of formed a foamed article, respectively, which were not elected and canceled prior to the allowance of U.S. Patent No. 5,662,731.

6. Claims 32-51 are rejected as being based upon a defective reissue Declaration under 35 U.S.C. 251 as set forth above and in Paper #4. See 37 CFR 1.175.

The nature of the defect(s) in the Declaration is set forth in the discussion above in this Office action.

7. Claims 32-51 are rejected under 35 U.S.C. 251 as being an improper recapture of claimed subject matter deliberately canceled in the application for the patent upon which the present reissue is based. As stated in *Ball Corp. v. United States*, 221 USPQ 289, 295

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(Fed. Cir. 1984):

The recapture rule bars the patentee from acquiring, through reissue, claims that are of the same or broader scope than those claims that were canceled from the original application.

The newly amended claims do not contain the following limitations which were either added to the claims during the prosecution of US '731 or patentability was argued based on these limitations being present in the original claims: (1) the inclusion of water as a component in the starch-based composition; (2) the fibrous material having an average fiber length greater than about 2 mm; (3) the fibers being substantially homogeneously or uniformly dispersed throughout the starch-based composition; (4) the limitation that the starch-based binder includes a substantially ungelatinized component comprising unmodified starch granules in an amount in the range from about 50% to about 90% by weight of the starch-based binder and a substantially gelatinized component comprising gelatinized starch in an amount in a range from about 10% to about 50% by weight of the starch-based binder prior to molding the composition into the article; (5) the inclusion of inorganic aggregate in an amount greater than 5% by weight or in the range of about 0% to about 80% by weight; (6) the claimed percentages of components a)-c) of patented claim 23; (7) the claimed percentages of components (a)-(d) of patented claim 30; (8) the limitation that the starch-based binder includes a gelatinized component comprising gelatinized starch in an amount from about 5% to about 70% by weight of the starch-based binder and the balance of the starch-based binder comprises an ungelatinized component which comprises ungelatinized unmodified starch granules; and (9) the

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moldable mixture has a viscosity greater than about 10 Pa•s. The combination of above items (1) through (4) were either added or argued during the prosecution of US '731 for claims 1-22. The combination of above items (2) through (6) were either added or argued during the prosecution of US '731 for claims 23-29. The combination of above items (1) through (3), (7) and (8) were either added or argued during the prosecution of US '731 for claim 30. The combination of above items (1), (2), (8) and (9) were either added or argued during the prosecution of US '731 for claim 31. Accordingly, all claims must include one of the above combinations of limitations that are not currently present in any of the pending claims presented for this reissue examination. See MPEP 1412.02 and 1412.03.

8. Claims 32-51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 32-51 recite limitations from different categories of invention, and it is not clear which category of invention the claim is actually directed to. The claim recites both composition of matter limitations and article of manufacture limitations, such that the claim is not clear whether it is directed to a composition of matter or an article of manufacture. For example, the preamble of the claim is clearly directed to the composition of matter, whereas the body of the claim includes article of manufacture limitations, such as thickness and composite, i.e., coated article. See *Ex parte Lyell*, 17 USPQ2d 1548 (BPAI 1990). Contrary to the statement on

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page 7 of the present response, a composition of matter that is shaped into a discrete article of manufacture is **no longer** a composition of matter under 35 USC 101, but rather an article of manufacture (Emphasis Added). 35 U.S.C. 101 reads as follows: Whoever invents or discovers any new and useful process, machine, **manufacture, or composition of matter**, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title. (Emphasis Added). 35 USC 101 is clear to the fact that a composition of matter is a distinct statutory class of invention from an article of manufacture. For purposes of searching the pending claims, the Examiner has determined that article of manufacture claims are the statutory class of invention being claimed.

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 32-49 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of (1) U.S. Patent No. 5,545,450, particularly note claims 1, 34, 78 and 79; (2) U.S. Patent No. 5,631,053, particularly note

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claims 1 and 7; (3) U.S. Patent No. 5,660,900, particularly note claims 1, 33, 70 and 71; (4) U.S. Patent No. 5,660,903, particularly note claims 1, 40, 47 and 49; (5) U.S. Patent No. 5,560,904, particularly note claims 1, 15 and 17; (6) U.S. Patent No. 5,665,442, particularly note claims 1, 51 and 52; (7) U.S. Patent No. 5,683,772, particularly note claims 1 and 81-92; (8) U.S. Patent No. 5,691,014, particularly note claims 1 and 2; (9) U.S. Patent No. 5,702,787, particularly note claims 1, 19, 36 and 37; (10) U.S. Patent No. 5,705,238, particularly note claims 1, 24 and 46-48; (11) U.S. Patent No. 5,705,239, particularly note claims 1, 27-31 and 45; (12) U.S. Patent No. 5,705,242, particularly note claims 1 and 8; (13) U.S. Patent No. 5,709,913, particularly note claims 1, 8, 49, 51, 53 and 54; (14) U.S. Patent No. 5,736,209, particularly note claims 73, 83 and 84; (15) U.S. Patent No. 5,738,921, particularly note claims 1, 9 and 42-47; (16) U.S. Patent No. 5,830,548, particularly note claims 1 and 13; (17) U.S. Patent No. 5,854,634, particularly note claims 1, 27, 60 and 64; (18) U.S. Patent No. 5,928,741, particularly note claims 1, 10 and 24; (19) U.S. Patent No. 6,030,673, particularly note claim 1; and (20) U.S. Patent No. 6,083,586, particularly note claims 1, 14, 15, 17 and 18. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the above listed U.S. Patents differ slightly in scope in at least one of the following ways: a generic binder is claimed along with a starch-based binder, filler material is present, percentage of components, thickness, fibers are optionally claimed, etc. However, such slight scope variation would have been obvious to the skilled artisan,

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motivated by the desire to obtain an article having desired properties associated with the variation of these limitations, i.e., a thicker article would exhibit enhanced tensile strength, etc.

11. Claims 50 and 51 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of (1) U.S. Patent No. 5,582,670, particularly note claim 47; (2) U.S. Patent No. 5,800,647, particularly note claims 68, 70, 72 and 73; and (3) U.S. Patent No. 5,810,961, particularly note claims 1 and 65. Although the conflicting claims are not identical, they are not patentably distinct from each other because the above listed U.S. Patents all disclose the step of applying a laminate film coating to at least a portion of a starch-based sheet/article. Additionally, the starch-based sheet/article limitations of the present claims are of a slightly different, but overlapping, scope that the starch-based sheet/article limitations of the above listed U.S. Patents.

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 32-42 and 44-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 91/12186 (referred to hereinafter as WO '186). WO '186 discloses thin-walled starch-based moldings having a thickness of about 0.5 to 1.5 mm (page 39 of translation),

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which has fibers having a length up to 1.5 mm dispersed therein (pages 17 and 88 of translation). The moldings are formed from a composition that contains between 27-69 wt.% starch (page 7 of translation). The moldings can be either in-mold coated (page 30 of translation) or laminated with a coating film (page 39 of translation), such as a polyester, i.e., PET (page 30 of translation). Additionally, the composition can be processed so as to yield a molding having a distinct non-porous outer surface skin layer which contains essentially no fillers and binding agents and a foam-like, porous core structure (page 92). Such a molding reads on the embodiment of claim 33. Alternatively, it is the examiner's position that the molding of WO '186 is identical to or only slightly different than the claimed embodiment prepared by the method of the claim 33, because both articles encompass a non-porous layer being formed on a starch-based molding. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983). With regard to claim 38, WO '186 does not disclose fibers having a length greater than 1.5 mm. However, "greater than 1.5 mm"

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as recited in claim 38 encompasses lengths which greater than 1.5 mm by only an infinitesimal amount. Such lengths are so close to 1.5 mm that one of ordinary skill in the art would have expected fibers having those lengths to have the same properties as 1.5 mm fibers. Hence, it would have been *prima facie* obvious to one of ordinary skill in the art, in view of the disclosure of WO '186, to use fibers having a length which is greater than 1.5 mm. See *Titanium Metals Corp v. Banner*, 778 F.2d 775, 783, 227 USPQ 773, 339 (Fed. Cir. 1985). WO '186 also discloses the claimed fiber concentration range of claim 39 and the incorporation of inorganic filler material in the starch-based composition (page 8 of translation). Additionally, WO '186 discloses the claimed density of the molding on page 11 of the translation. The various shapes of the formed article of claims 48 and 49 are disclosed throughout the Examples and in the Abstract. WO '186 is silent as to the aspect ratio of the fibrous material. However, WO '186 does disclose that the fibers can have a length up to 1.5 mm. It would have been obvious to the skilled artisan to have optimized and found workable fiber aspect ratio ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. In the present case, it would have been obvious to have used thin fibers, which have an aspect ratio within the present claimed range, motivated by the desire to optimize the mechanical stability, i.e., tensile and flexural strengths, while minimizing the thickness defects of the molding that results from adding NSC (non-starch components) into the

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composition.

14. Applicant's arguments filed on October 4, 2000 have been fully considered. The art rejections of Paper #4 are withdrawn in view of the present amendment and arguments.

15. The rejection over 35 USC 251 is maintained for the reasons detailed above and the following reasons. The fact that the applicants and the attorney for the applicants considers that the original patent contained an error does not mean that that particular error can be corrected in an Reissue application. In the present case, the applicant is attempting to change the invention to inventions very similar to the two non-elected inventions of the original prosecution. This is impermissible for the reasons set forth in MPEP 1450. The applicant argument that their attorney simply failed to appreciate the full scope of the invention is not persuasive, because it is clear that the error attempted to be corrected in this Reissue is not an error permitted to be corrected in a Reissue examination. The Restriction requirement in the original prosecution is quite clear to the fact that the Examiner was requiring a restriction between the 3 different statutory classes of inventions being claimed under 35 USC 101, namely, a composition of matter, an article of manufacture and a method of manufacture. The present applicants have accepted the issuance of the original patent with its claims to a single elected invention. By acquiescing in the Examiner's restriction requirement, and failing to file a divisional application on the subject matter of the non-elected claims, the applicants have foreclosed (because that was not error) their right to claim that subject matter (See *In re Weiler, et*

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al., 229 USPQ 673 (CAFC 1986)). The argument that the present claims are still drawn to a composition of matter, and not an article of manufacture, is not persuasive for the reasons detailed above in paragraph #8. The argument that the claims as now amended fall within the scope of elected Group I is not persuasive, because the claims which issued from the elected Group I are clear to the fact that they are **not** articles of manufacture and are compositions.

16. Applicant's "material aspect" argument with regard to recapture is not persuasive, because there is nothing in the current MPEP that supports this argument. Note that MPEP 1412.02 requires that the Examiner to determine if recapture issues are present for each omitted or broadened limitation. In order for recapture to not be an issue, all limitations of the claims of the Reissue application must be of the same or narrower scope than the patented claims.

17. While MPEP 1412.01 does allow for some significant lead way on what may be claimed in a Reissue application, this section of the MPEP still requires that the claims of the Reissue be drawn to what the patentee objectively **intended** as his or her invention (Emphasis Added). 35 USC 251 authorizes reissue for "the" invention disclosed in the original patent, not just "any" and "every" invention for which one may find some support in the disclosure of the original patent (See *In re Weiler, et al.*, 229 USPQ 673 (CAFC 1986)). As stated in *U.S. Industrial Chemicals, Inc v. Carbide & Carbon Chemicals Corp.*, 315 U.S. at 676, 53 USPQ at 9-10, "[i]t is not enough that an invention


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might have been claimed in the original patent because it was suggested or indicated in the specification. It must appear from the face of the instrument that what is covered by the reissue was intended to have been covered and secured by the original."

18. As a suggestion to advance the prosecution of the present case, the Examiner suggests adding new claims which are commensurate in scope with the original patented claims that further included the following limitation (either added to claims commensurate in scope with the original patented claims or added as new dependent claims): --wherein said starch-based composition is capable of being formed into an article of manufacture that can receive a coating on at least a portion thereof--.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blaine R. Copenheaver whose telephone number is (703) 308-1261. The examiner can normally be reached on Tuesday-Friday from 6:30 AM-4:00 PM and on alternating Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Terrel H. Morris, can be reached at (703) 308-2414. The fax numbers for Technology Center 1700 are (703) 305-7718 and (703) 305-3601.


Blaine R. Copenheaver
Primary Examiner
Art Unit 1771

B. Copenheaver
December 29, 2000